

The listing of claims will replace all prior versions and listing of claims in the application:

Listing of Claims:

Claims 1-33 (cancelled)

Claim 34 (currently amended). A sustained release coating composition for applying a barrier to a structure to prevent the infiltration of pest species, comprising:

- (a) a transport polyurethane polymer enriched in hydrophobic elements comprising one or more of non-aromatic isocyanate segments, being enriched by predominating in urea linkages, or containing hard segments; and
- (b) a pellet comprising a pesticide incorporated into a pellet polymer and dispersed in said transport polyurethane polymer.

Claim 35 (original). The coating composition of claim 34, wherein said pellet polymer is one or more of polyethylene, polypropylene, polybutenes, natural rubber, polyisoprene, polyesters, styrene butadiene rubber, polyacrylates, polymethacrylates, polyethylene terephthalate, epoxy resins, unsaturated polyester resins, or polyurethane elastomer.

Claim 36 (original). The coating composition of claim 34, wherein said pesticide is incorporated by an inorganic sorbent and then dispersed in said pellet polymer.

Claim 37 (original). The coating composition of claim 36, wherein said inorganic sorbent is one or more of silica; carbon; aerogels; oxides of metals; and oxides, carbonates or phosphates of Group 2 metals.

Claim 38 (original). The coating composition of claim 35, wherein said pellets are coated with a barrier material.

Claim 39 (original). The coating composition of claim 38, wherein said barrier material is one or more of polyvinylidene chloride, amorphous nylon, ethylene-vinyl alcohol, epoxy resins, and unsaturated polyesters.

Claim 40 (original). The coating composition of claim 34, wherein said pellets range in particle size from about 100 microns to 12,700 microns.

Claim 41 (original). The coating composition of claim 34, wherein said coating composition also contains one or more of powdered pepper, a pepper extract, an antimicrobial agent, pigments, ultraviolet radiation absorbers, molecular sieves, or silica gel.

Claim 42 (cancelled).

Claim 43 (original). The coating composition of claim 34, wherein said polyurethane polymer is formed from said non-aromatic diisocyanate and a diol chain extender of up to 12 carbon atoms.

Claim 44 (cancelled).

Claim 45 (original). The coating composition of claim 34, wherein said urea linkage are formed from the reaction of a non-aromatic polyisocyanate with the reaction product of a diisocyanate and a diamine.

Claim 46 (original). The coating composition of claim 43, wherein said diisocyanate is one or more of toluene diisocyanate (TDI), methylene diphenyl diisocyanate (MDI), polymeric methylene diphenyl diisocyanate (PMDI), hexamethylene diisocyanate (HDI), isophorone diisocyanate (IPDI) and said diamine is one or more of 4,4'-methylene dianiline, 1,4-diaminocyclohexane, 2,4-diaminotoluene, 2,6-diaminotoluene, or 1,6-diaminohexane.

Claim 47 (original). The coating composition of claim 43, wherein an excess of polyisocyanate is used to form said reaction product.

Claim 48 (original). The coating composition of claim 35, wherein polyurethane polymer is formed from an aliphatic or alicyclic isocyanate.

Claim 49 (original). The coating composition of claim 48, wherein said aliphatic or alicyclic isocyanate is one or more of 1,6-hexamethylene diisocyanate (HDI), 1,4-tetramethylene diisocyanate, hydrogenated methylene diphenyl diisocyanate, 1,4-cyclohexane diisocyanate, or isophorone diisocyanate.

Claim 50 (original). The coating composition of claim 48, wherein polyurethane polymer also is formed from a polyol having a molecular weight of less than about 1,000.

Claim 51 (original). The coating composition of claim 48, wherein said polyurethane polymer contains hard segments made by one or more of;
the use of polyisocyanates having greater than 2 isocyanate groups per molecule;
use of polyol having a molecular weight of less than about 1,000 and greater than 2 hydroxyl groups per molecule;
an excess of isocyanate is used;
or reaction of said isocyanate with an amine.

Claim 52 (original). The coating composition of claim 51, wherein said isocyanate is polymeric methylene diphenyl diisocyanate, and said polyol is one or more of trimethylolpropane, glycerin, Sorbitol, glycerin, polyether triols, trimethylol propane polyether triols, or hydrogenated castor oil.

Claim 53 (original). The coating composition of claim 34, wherein polyurethane polymer is formed from an aliphatic or alicyclic polyol.

Claim 54 (original). The coating composition of claim 53, wherein said aliphatic or alicyclic polyol is one or more of hydroxy terminated polybutadiene, straight chain hydrocarbons that have 8 to 30 carbons with hydroxyl groups at each end, carbocyclic rings that contain from 5 to 32 members with hydroxyl groups that are not on adjacent carbons, or carbocyclic rings that contain from 5 to 32 members that have one or more rings and that have two straight chain hydrocarbon chains that are substituents with two hydroxyl groups present, one at the end of each pendent chain.

Claim 55 (original). The coating composition of claim 48, wherein polyurethane polymer is formed from an aliphatic or alicyclic polyol.

Claim 56 (original). The coating composition of claim 34, which is applicable to said structure by one or more of spraying, roller coating, or brush coating.

Claim 57 (original). The coating composition of claim 34, wherein the wherein the pesticide is one or more of pyrethrin, tefluthrin, lambdacyhalothrin, cyfluthrin, deltamethrin, isofenphos, fenvalerate, cypermethrin, or permethrin.

Claim 58 (original). The coating composition of claim 34, wherein said transport polyurethane polymer is one or more of a coating composition, a sealant, a caulk, or an adhesive.

Claim 59 (original). The coating composition of claim 34, wherein said transport polyurethane polymer is synthesized from isocyanates with functionality greater than 2.

Claim 60 (original). The coating composition of claim 34, wherein said transport polyurethane polymer is synthesized from low molecular weight polyols with functionality greater than 2.

Claim 61 (original). The coating composition of claim 60, wherein said transport polyurethane polymer is synthesized from polyols, which are one or more of trimethylolpropane, glycerin, sorbitol, glycerin polyether triols, and trimethylol propane polyether triols.

Claim 62 (original). The coating composition of claim 48, wherein polyurethane polymer is formed from an epoxy or silanol polyol that produces block copolymers.